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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,310	02/01/2002	Paul C. Clark	176.0004CIP	8559

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EXAMINER

PICH, PONNOREAY

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/060,310

Applicant(s)

CLARK, PAUL C.

Examiner

Ponnoreay Pich

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-12 are pending.

Priority

The examiner recognizes applicant's right to an earlier effective filing date due to the current application being a continuation in part of application 09/568,215 filed on 5/9/2000.

Information Disclosure Statement

The first page of applicant's IDS submitted on 8/12/2004 has been considered. The Reinert document on the second page of the IDS was not considered because applicant did not supply a copy of the NPL document.

Drawings

Figure 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Note on page 3, paragraph 15 of the specification, Figure 5 is described as a "standard PC", implying it is a prior art PC. The discussion of Figure 5 on page 15,

paragraph 62 does not disclose any feature shown on Figure 5 which is new and unique only to applicant's invention.

Specification

The disclosure is objected to because of the following informalities:

1. On page 5, line 9 of paragraph 30 of the specification, there should be a space between "machine" and "or".
2. On page 9, paragraph 40, line 1 refers to Figure 2A. Figure 2A does not exist.
3. On page 11, line 2 of paragraph 52, there should be a space between "10" and "could".
4. On page 14, line 2 of paragraph 60, there should be a period after "optional".

The use of the trademark MICROSOFT INTERNET EXPLORER and SONY MEMORY STICK on page 5 and 6 have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Appropriate corrections are required.

Claim Objections

Claim 1 is objected to because of the following informalities:

1. As per claim 1, the examiner believes the last limitation of claim 1 should state "a server" instead of just "server".

2. As per claim 2, the examiner assumes applicant meant “one of a biometric or a digital signature.”
3. As per claim 11, on line 5, “including” is repeated twice. The examiner assumes it should only appear once.
4. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Claim 1 recites “the data transmission” on line 4, which lacks antecedent basis.
It is unclear if perhaps “the data transmission” is the same as “an encrypted data transmission” recited in the preceding line.
2. Claim 1 recites “the decrypted data” in the last line, which lacks antecedent basis. The examiner notes the previous limitation recites, “decrypting the data transmission.” However, from the way it is recited, it is the transmission that is decrypted, not the data contained in the transmission. It is unclear if applicant meant for “the decrypted data” to refer to the decrypted data transmission, the data in the transmission, or some other decrypted data.
3. Claim 4 recites “the application server” which lacks antecedent basis.

4. Claim 4 recites “the data transmission function” which lacks antecedent basis. It is unclear if “the data transmission function” is the same as “the data transmission” earlier recited.
5. Claim 5 recites “enhancing data prior to sending the data transmission.” It is unclear which data is enhanced.
6. Claim 6 recites “the data transmission” in line 8, which lacks antecedent basis.
7. Claim 6 recites “the data” in the last limitation. It is unclear to which data is being referred—the enhanced data, the de-enhanced data, or some other data.
8. As per claim 7, it is unclear from the way the limitation is recited if applicant meant “the data” being enhanced means that it is encrypted or if there is data in the enhanced data that is further encrypted as well as being enhanced.
9. Claim 11 recites “the data transmission” in line 8, which lacks antecedent basis.
10. Claim 11 recites “the data” in line 9 which lacks antecedent basis. It is unclear if “the data” is the “enhanced data” recited in line 3.
11. Claim 11 recites in lines 9-10 “to transmit the data”. It is unclear which data is being transmitted— the enhanced data, the de-enhanced data, or some other data.
12. Claim 12 recites “the first secure domain” in line 4, which lacks antecedent basis.
13. Claim 12 recites “the data transmission” in line 8, which lacks antecedent basis.
14. Claim 12 recites “said processor” in line 9, which lacks antecedent basis.
15. Claim 12 recites in line 9, “to transmit the data”. It is unclear to which data is being referred.

16. Any claims not specifically addressed are rejected by virtue of dependency.

17. Appropriate corrections are required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1:

Claim 1 refers to a method for secure communication between first and second domains which can be implemented via software alone. There is no hardware of any form recited in claim 1. The examiner notes that software by itself is non-statutory.

Claim 2-5:

Claims 2-5 merely further define the software method of claim 1. Nothing statutory is recited in the claims.

Claim 6:

Claim 6 refers to an article of manufacturer comprising a computer usable medium comprising software implemented computer readable program code. Applicant defined on page 5 and 6 of the specification that a computer usable medium comprises a carrier wave. A carrier wave is not tangible and is not statutory. As claim 6 only refers to non-tangible software, nothing statutory is recited.

Claims 7-10:

Claims 7-10 merely further define the software components of claim 6. Nothing statutory is recited.

Claim 11:

Claim 11 refers to a software logical unit (see spec, p4, paragraph 17), comprising a software processor and an access control list implemented in software. Nothing statutory is recited.

Claim 12:

Claim 12 refers to a software logical system (see spec, p4, paragraph 26), comprising software logical units and a software processor. Nothing statutory is recited.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Dickenson, III et al (US 6,609,196).

Claim 1:

Dickenson discloses the limitations of:

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1. Identifying a sender of an encrypted data transmission received from a logical unit using a personal identifier associated with the data transmission (col 2, lines 35-48 and col 8, lines 12-22).
2. Determining whether the sender is authorized to perform the data transmission (col 2, line 59-col 3, line 7 and col 8, lines 12-22).
3. Decrypting the data transmission if it is determined that the sender is authorized to perform the data transmission (col 2, line 59-col 3, line 7; col 8, lines 12-22 and lines 48-56).
4. Transmitting the decrypted data to a server (col 8, lines 48-56 and Fig 5A-5C).

Claim 2:

Dickenson further discloses the personal identifier is one of a biometric or digital signature (col 8, lines 12-22).

Claim 3:

Dickenson further discloses determining whether the sender is authorized to perform the data transmission includes checking an access control list to determined the sender's privilege level (col 2, line 59-col 3, line 7 and col 8, lines 12-22).

Claim 4:

Dickenson further discloses preventing the data transmission from reaching the application server if it is determined that the sender is not authorized to perform the data transmission function (col 2, line 59-col 3, line 7 and col 8, lines 12-22).

Claim 5:

Dickenson further discloses enhancing data prior to sending the data transmission (col 8, lines 48-65).

Claim 6:

Dickenson discloses the limitations of:

1. First computer readable program code for causing a first logical unit to identify a sender of an enhanced, i.e. encrypted, data transmission received from a second logical unit (col 2, lines 35-48 and col 8, lines 12-22).
2. Computer readable program code for determining whether the sender is authorized to perform the data transmission (col 2, line 59-col 3, line 7 and col 8, lines 12-22).
3. Computer readable program code for causing the first logical unit to de-enhance, i.e. decrypt, the data (col 2, line 59-col 3, line 7; col 8, lines 12-22 and lines 48-56).
4. Compute readable program code for causing the first logical unit to send the data to a third logical unit (col 8, lines 48-56 and Fig 5A-5C).

Note that because Dickenson's invention is computer implemented, the limitation of a computer usable medium having computer readable program code embodied therein for securely transmitting data from a trusted domain to an untrusted domain comprising the above limitations is inherent to Dickenson's invention.

Claim 7:

Dickenson further discloses wherein the data in the enhanced data is encrypted (col 2, lines 35-38).

Claim 9:

Dickenson further inherently discloses computer readable program code for causing the first logical unit to determine a privilege level of the sender by searching an access control list that contains the sender's privilege level (col 2, line 59-col 3, line 7 and col 8, lines 12-22). Note Dickenson discloses that certain users may be exempted from some filter rules. This implies that there exists a way to identify those users, i.e. an access control list, and which rules they are exempt from.

Claim 10:

Dickenson further inherently discloses program code for preventing the data from reaching the third logical unit if it is determined that the sender is not authorized to transmit the data (col 2, line 59-col 3, line 7 and col 8, lines 12-22). Note that Dickenson discloses that if only certain users are exempt from filter rules. If the messages aren't to be sent according to the filter rules, the messages are prevented from transmitting.

Claim 11:

Dickenson discloses the limitation of a processor programmed to receive enhanced data transmitted from a first logical unit and to identify the sender of the enhanced data (col 2, lines 35-48; col 8, lines 12-22; and Fig 5A-5C).

Dickenson inherently discloses an access control list stored in a memory location including access rights for the sender (col 2, line 59-col 3, line 7 and col 8, lines 12-22).

Dickenson further discloses said processor further being programmed to query said access control list to determine whether the sender has sufficient rights to perform the data transmission (col 2, line 59-col 3, line 7 and col 8, lines 12-22), said processor further programmed to de-enhance the data and to transmit the data to the second domain when it is determined that the sender has sufficient rights to perform the transmission (col 2, line 59-col 3, line 7; col 8, lines 12-22 and lines 48-56).

Claim 12:

Dickenson discloses the limitation of a first logical unit configured to enhance data and to transmit the enhanced data through an outbound proxy across the first secure domain (Fig 5A-5C).

Dickenson further discloses a second logical unit configured to receive data from said first logical unit, said second logical unit defining a boundary between the first domain and the second domain (Fig 5A-5C), said second logical unit being further configured to identify a sender of the enhanced data, to determine whether the sender has sufficient rights to perform the data transmission (col 2, lines 35-48; col 8, lines 12-22; and Fig 5A-5C), said processor being further configured to de-enhance the data and to transmit the data to a logical unit in the second domain when it is determined that the sender has sufficient rights to perform data transmission (col 2, line 59-col 3, line 7; col 8, lines 12-22 and lines 48-56).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dickenson, III et al (US 6,609,196).

Claim 8:

Dickenson does not disclose wherein enhanced data includes biometrically secured data. However, data being biometrically secured was well known in the art at the time applicant's invention was made. It would have been obvious to one of ordinary skill in the art to have modified Dickenson's invention such that enhanced data includes biometrically secured data. One of ordinary skill would have been motivated to do so as biometrically secured data are typically more secure than ones secured using other types of computer generated keys and it allows the user of the system to not have to remember the encryption key or carry around an encryption token.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 8:00am-4:30pm Mon-Fri.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ponnoreay Pich
Examiner
Art Unit 2135

PP



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